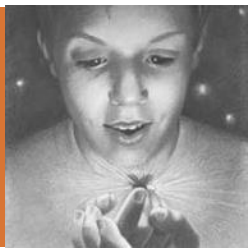
Student Name _____

Teacher Name _____

School _____

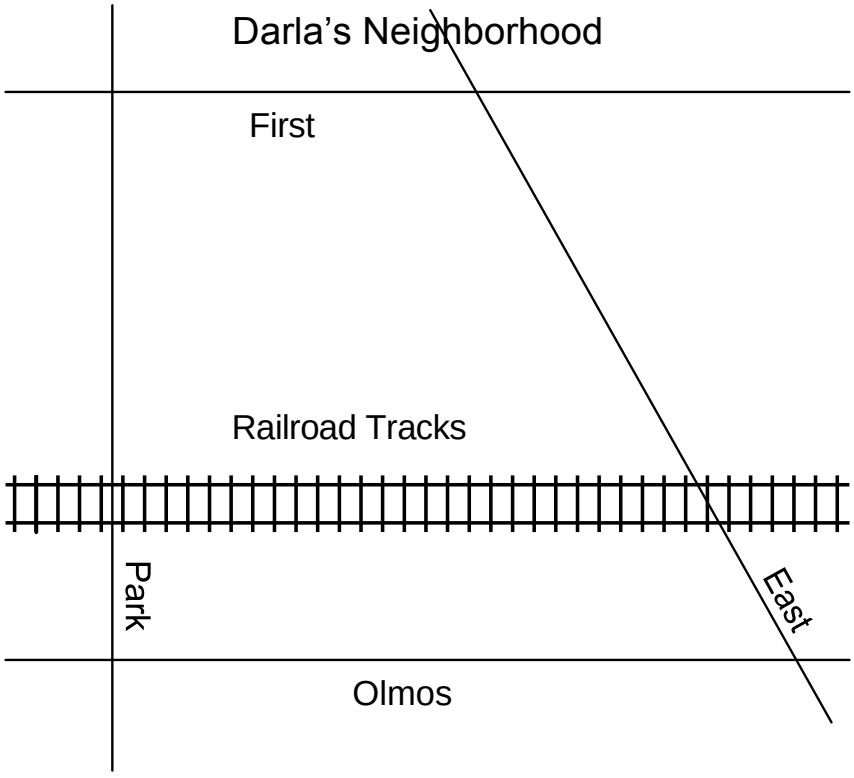
System _____

Mathematics



Part 1

1 A map of Darla's neighborhood is shown below.



Darla lives on a street shown on this map that is perpendicular to the railroad tracks. On which street does Darla live?

A. East

B. First

C. Olmos

D. Park

Go On ▶

2 A librarian had a total of 390 bookmarks in boxes. Each box contained 30 bookmarks. Exactly how many boxes did the librarian have?

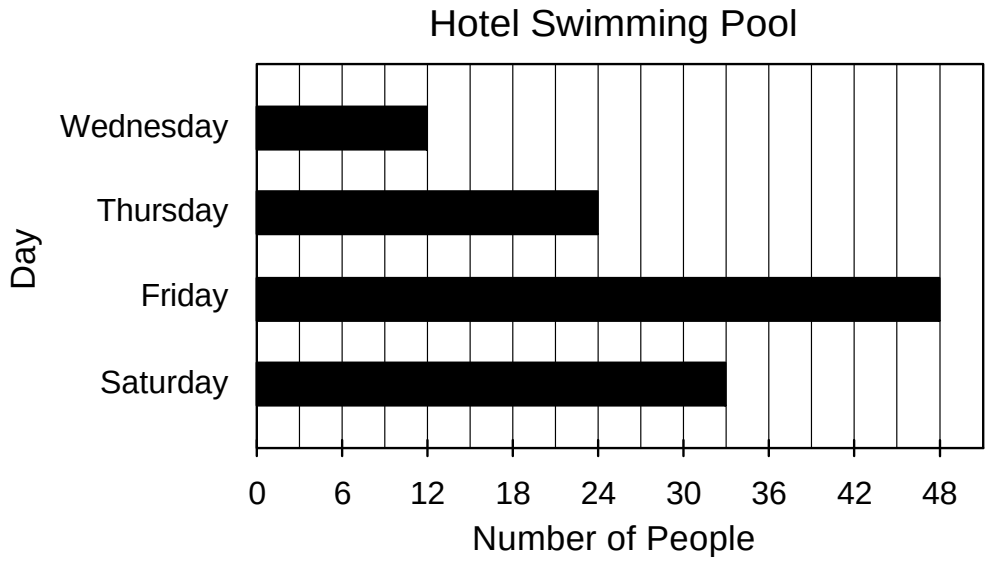
A. 420

B. 360

C. 13

D. 12

3 The graph below shows the number of people who used a hotel swimming pool on each of four days.



Which is the best estimate of the difference between the combined number of people who used the pool on Thursday and Friday and the combined number of people who used the pool on Wednesday and Saturday?

A. 110

B. 100

C. 30

D. 20

4 Which number sentence uses the associative property to show that (5+8)+12=25?

A. (5 + 8) + 12 = 12 + (5 + 8)

B. (5 + 8) + 12 = 5 + (8 + 12)

C. (5 + 8) + 12 = 5 + (25 + 12)

D. (5 + 8) + 12 = (5 + 8) + (5 + 12)

5 How is four hundred twenty thousand, three hundred six written in standard form?

A. 420,306

B. 42,360

C. 42,306

D. 4,236

Go On ▶

6 Carol had 48 jellybeans to put on cupcakes. She put j jelly beans on each cupcake.
Which expression best represents the number of jelly beans Carol put on each cupcake?

A. $48 \div j$

B. $48 \times j$

C. $48 - j$

D. $48 + j$

7 The model below shows the dimensions of the bottom of a drawer.

15 inches

45 inches

Area = length × width

What is the area of this model?

A. 60 square inches

B. 120 square inches

C. 655 square inches

D. 675 square inches

8 Which number is a common multiple of 4 and 8?

A. 12

B. 24

C. 36

D. 44

9 What is one way to show that the number sentence below is true?

$$3(6 + 8) = 42$$

A. $3(6 + 8) = (3 + 6) + (3 + 8)$

B. $3(6 + 8) = (3 + 6) \times (3 + 8)$

C. $3(6 + 8) = (3 \times 6) \times (3 \times 8)$

D. $3(6 + 8) = (3 \times 6) + (3 \times 8)$

Go On ▶

10 The list below shows the heights of four bean plants.

- Plant S: 0.75 meter
- Plant T: $\frac{1}{4}$ meter
- Plant U: 0.6 meter
- Plant V: $\frac{4}{5}$ meter

Which bean plant is the tallest plant?

A. Plant S

B. Plant T

C. Plant U

D. Plant V

11 Multiply: 638 × 26 =

A. 16,588

B. 16,348

C. 5,104

D. 4,954

12 The list below shows the number of hits a baseball player had during each of four years.

- Year 1 — 191
- Year 2 — 41
- Year 3 — 159
- Year 4 — 144

Which estimate is closest to the total number of hits the baseball player had during these years?

A. 700

B. 530

C. 520

D. 300

Go On ▶

13 Which number sentence is true?

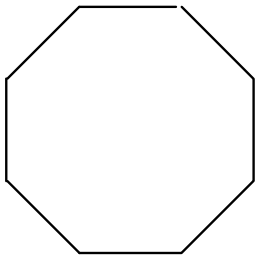
A. $\frac{1}{3} < \frac{1}{5}$

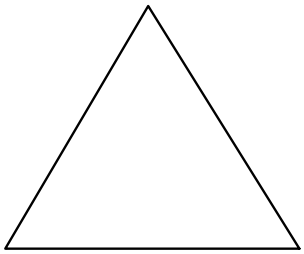
B. $\frac{3}{4} > \frac{6}{8}$

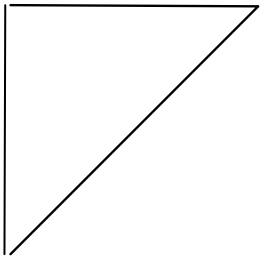
C. $\frac{1}{3} > \frac{1}{5}$

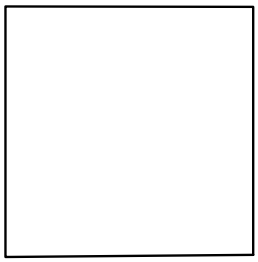
D. $\frac{3}{4} < \frac{6}{8}$

14 Emilio drew a figure with only acute angles. Which figure could be the one Emilio drew?

A. 

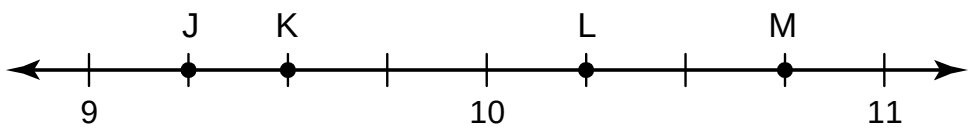
B. 

C. 

D. 

Go On ▶

15 Which point <u>best</u> represents $10\frac{3}{4}$ on the number line below?



A. Point J

B. Point K

C. Point L

D. Point M

16 Charles has a number machine that changes numbers based on a rule. The table below shows some numbers that were put into the number machine and the numbers that came out of the number machine.

Number Machine

In	Out
14	5
16	7
18	9
20	11
22	13

Each number that came out of the number machine is

A. 11 less than the number that went into the number machine.

B. 9 more than the number that went into the number machine.

C. 9 less than the number that went into the number machine.

D. 2 more than the number that went into the number machine.

17 Hakeem measured the distance between his classroom and the library at his school. Which unit is best to use when measuring this distance?

A. centimeters

B. kilometers

C. yards

D. miles

Go On ▶

18 The race times for two students are shown below.

- Felix ran the race in 11 seconds.
- Sarah ran the race in 9.8 seconds.

What is the difference between these two race times?

A. 1.2 seconds

B. 2.8 seconds

C. 8.2 seconds

D. 8.7 seconds

19 Which number has a 3 in the hundreds place?

A. 130,510

B. 210,340

C. 300,415

D. 500,135

20 Which list shows only multiples of 6?

A. 24, 36, 48, 72

B. 18, 24, 38, 46

C. 16, 26, 46, 56

D. 1, 2, 3, 6

Go On ▶

21 How many milliliters are equivalent to 45 liters?

1 liter = 1,000 milliliters

A. 45,000 milliliters

B. 4,500 milliliters

C. 450 milliliters

D. 45 milliliters

22 Oliver has 20 snack bags. He put p pieces of cheese into each bag. Which expression best represents the total number of pieces of cheese Oliver put into these bags?

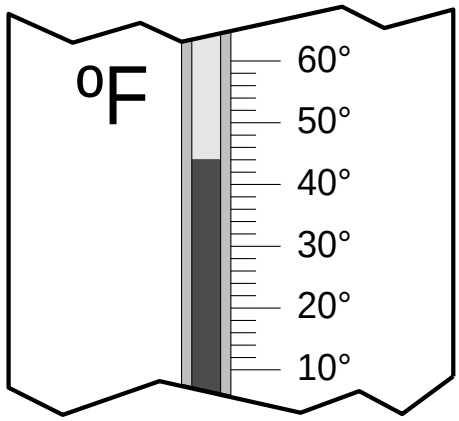
A. $20 - p$

B. $p + 20$

C. $20 \div p$

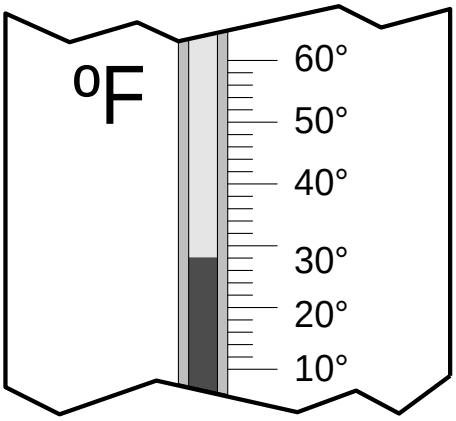
D. $p \times 20$

23 The thermometer below shows the temperature outside when Hailey went to sleep.

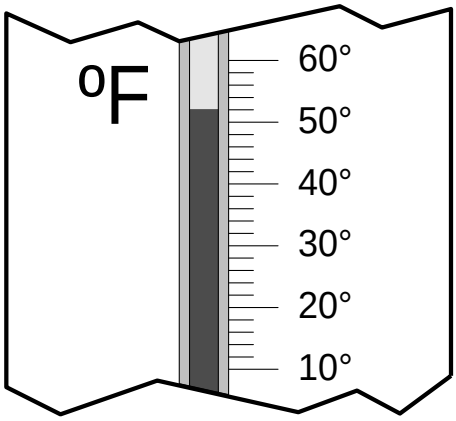


When Hailey woke up the next morning, the temperature had decreased 8°F. Which thermometer shows the temperature when Hailey woke up?

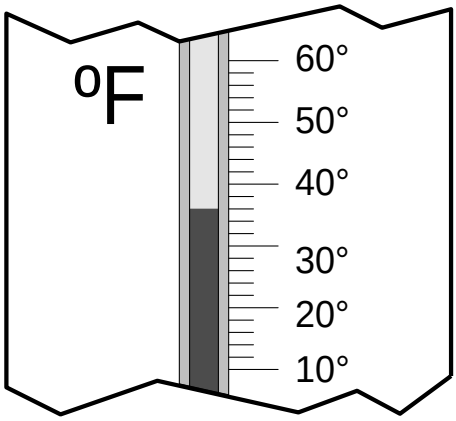
A.



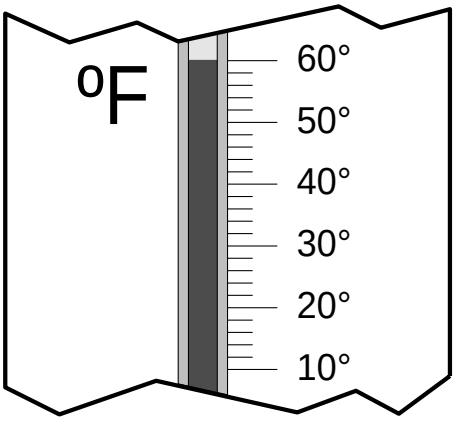
C.



B.



D.



Go On ▶

24 Which number is equivalent to $\frac{17}{5}$?

A. 3.2

B. 3.4

C. 3.5

D. 3.7

25 Rebecca has two pieces of ribbon.

- She has a piece of blue ribbon that is $\frac{1}{3}$ inch long.
- She has a piece of yellow ribbon that is $\frac{3}{4}$ inch long.

What is the total length of these two pieces of ribbon?

A. $\frac{1}{3}$ inch

B. $\frac{4}{7}$ inch

C. $1\frac{1}{12}$ inches

D. $1\frac{1}{3}$ inches

STOP

DO NOT

MARK

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PAGE

Part 2

26 Which comparison is true?

A. $\frac{2}{8} > \frac{1}{4}$

B. $\frac{1}{4} = \frac{3}{12}$

C. $\frac{2}{8} = 0.28$

D. $\frac{1}{4} = 0.20$

27 Ms. Arnold arranged her math club students into 6 rows for a picture.

- The first row had 5 students.
- Each row after the first row had 2 more students than the row before it.

What was the total number of students in the 6 rows?

A. 15

B. 28

C. 30

D. 60

28 Which number is equivalent to $\frac{32}{6}$?

A. $5\frac{2}{6}$

B. $5\frac{1}{6}$

C. $3\frac{2}{6}$

D. $2\frac{5}{6}$

29 Which number has the same value as seven hundreds, three-tenths, and five hundredths?

A. 7.35

B. 7.53

C. 700.35

D. 700.53

30 Subtract: $\frac{9}{12} - \frac{1}{3} =$

A. $\frac{8}{9}$

B. $\frac{5}{6}$

C. $\frac{2}{3}$

D. $\frac{5}{12}$

31 Divide: 423 ÷ 9 =

A. 46

B. 47

C. 48

D. 49

32 Mr. Fuentes bought a package that contained a total of n napkins. He used 136 napkins from this package. Which expression best represents the number of napkins left in the package Mr. Fuentes bought?

A. n + 136

B. n – 136

C. n × 136

D. n ÷ 136

Go On ▶

33 Which list shows all the common factors of 28 and 48?

A. 1 and 4

B. 2 and 4

C. 1, 2, and 4

D. 1, 2, 4, and 8

34 Which decimal is equivalent to $\frac{1}{5}$?

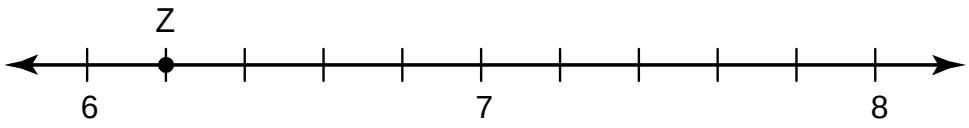
A. 0.1

B. 0.2

C. 0.5

D. 1.5

35 Which mixed number is best represented by Point Z on the number line below?



A. $6\frac{1}{5}$

B. $6\frac{1}{4}$

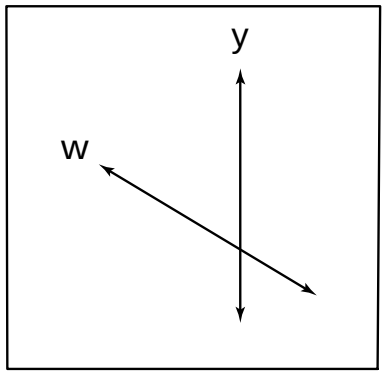
C. $7\frac{1}{4}$

D. $7\frac{4}{5}$

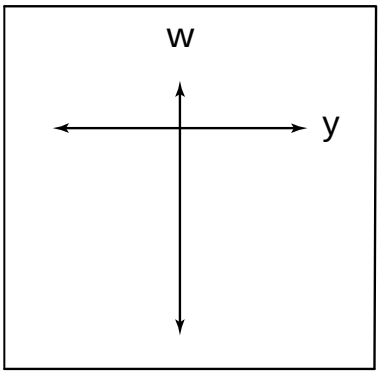
Go On ▶

36 Which model shows lines that are intersecting but do <u>not</u> appear to be perpendicular?

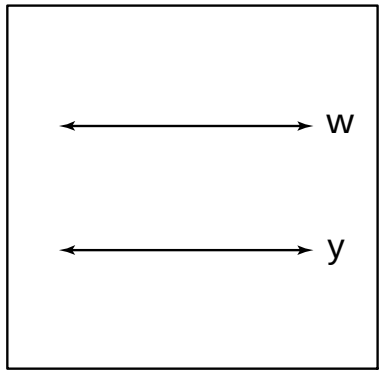
A



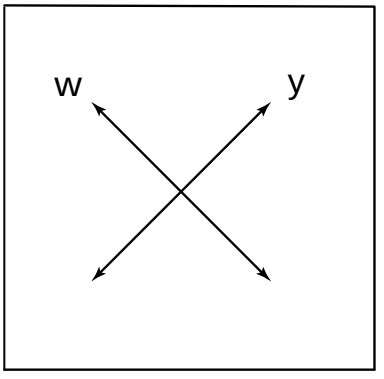
C



B



D



37 How is seventy and twelve hundredths written in standard form?

A. 7.012

B. 70.012

C. 70.12

D. 7,012

38 Fiona bought a DVD from the store. Which is the best estimate of the mass of the DVD Fiona bought?

A. 15 kilograms

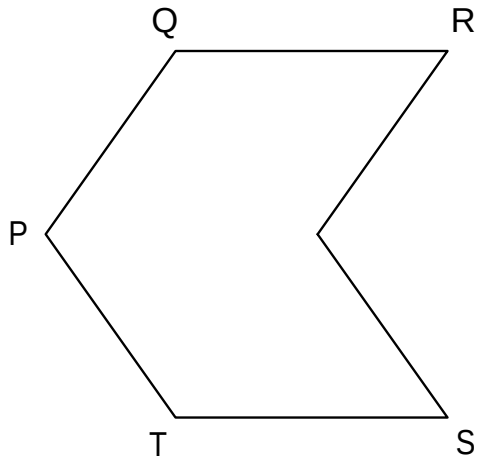
B. 15 pounds

C. 15 inches

D. 15 grams

Go On ▶

39 Figure PQRST is shown below.



Which type of angle does Angle P appear to be?

A. right angle
B. acute angle
C. obtuse angle
D. straight angle

40 Which number sentence uses the commutative property to show that 10 × 2 × 5 = 100 ?

A. 10 × 2×5 = 50 + 50
B. 10 × 2×5 =100 ×1
C. 10 × 2×5 = 5 × 2×10
D. 10 × 2×5 = 5 + 2 + 10

Go On ▶

41 A doctor treated 14 patients on each of her workdays. What is the total number of patients the doctor treated in 28 workdays?

A. 130

B. 140

C. 362

D. 392

42 There are 20 students in a class.

- There are $\frac{1}{2}$ of the students who are wearing purple shirts.
- There are 4 of the students who are wearing green shirts.
- The rest of the students are wearing white shirts.

What fraction represents the students in the class who are wearing white shirts?

A. $\frac{1}{5}$

B. $\frac{1}{4}$

C. $\frac{3}{10}$

D. $\frac{7}{10}$

43 The table below shows the total number of dollars William saved after different number of weeks.

Dollars William Saved

Total Number of Dollars	Number of Weeks
15	5
21	7
27	9
33	11
39	13

If the pattern in the table continues, after how many weeks will William have exactly 45 dollars saved?

A. 15

B. 18

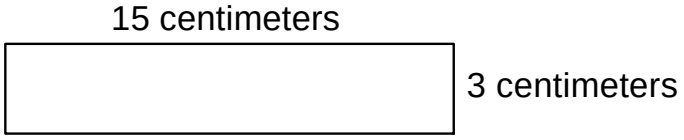
C. 24

D. 52

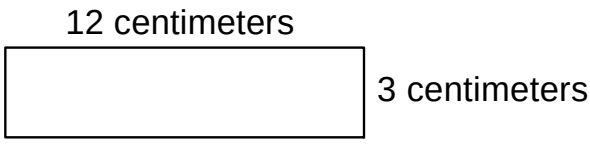
Go On ▶

44 Which shape does not have a perimeter of 36 centimeters?

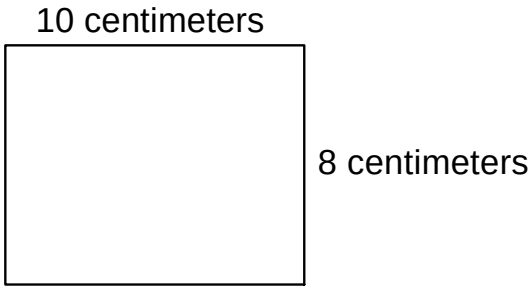
A.



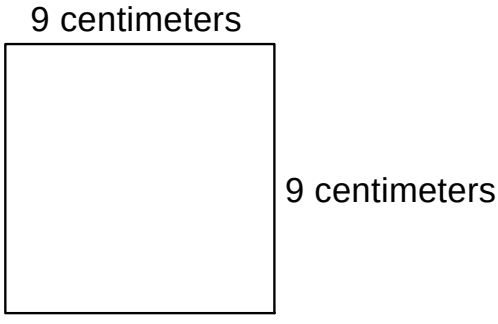
B.



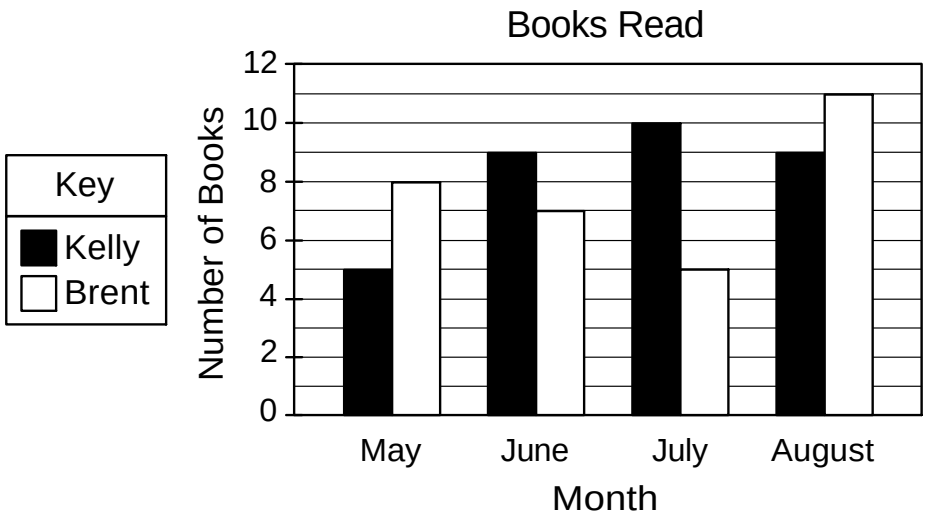
C.



D.



45 The graph below shows the numbers of books two students read during each of four months.



According to the graph, what is difference between the total number of books Kelly read and the total number of books Brent read?

A. 2

B. 4

C. 64

D. 70

46 A parking lot has a length of 183 feet. What is the length of this parking lot in yards?

1 yard = 3 feet

A. 549 yards

B. 186 yards

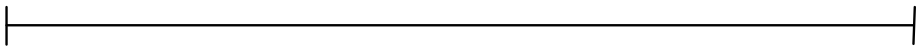
C. 63 yards

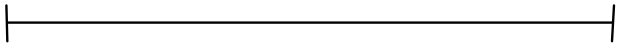
D. 61 yards

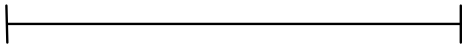
Go On ▶

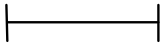
47 Use the centimeter side of your ruler to help you answer this problem.

Ella drew a line segment with a length of 4 centimeters. Mateo drew a line segment with a length that is twice as long as Ella's line segment. Which line segment could be the one Mateo drew?

A. 

B. 

C. 

D. 

Mathematics Answer Key

Question	SPI	Answer		Question	SPI	Answer
1	4.1	D		25	2.8	C
2	2.12	C		26	2.6	B
3	5.2	C		27	3.3	D
4	1.1	B		28	2.7	A
5	2.1	A		29	2.3	C
6	3.1	A		30	2.8	D
7	4.9	D		31	2.12	B
8	2.4	B		32	3.1	B
9	1.1	D		33	2.4	C
10	2.5	D		34	2.5	B
11	2.11	A		35	2.2	A
12	5.2	B		36	4.1	A
13	2.6	C		37	2.1	C
14	4.4	B		38	4.7	D
15	2.2	D		39	4.4	C
16	3.3	C		40	1.1	C
17	4.7	C		41	2.1	D
18	2.10	A		42	2.10	C
19	2.3	B		43	3.3	A
20	2.4	A		44	4.9	B
21	4.8	A		45	5.2	A
22	3.1	D		46	4.8	D
23	1.4	B		47	1.4	B
24	2.7	B				